

October 31, 2014
Arch Grounds Tree Replacement
Video Transcript

Bob Moore, Historian, Jefferson National Expansion Memorial:

The grounds at the Gateway Arch were designed by a landscape architect named Dan Kiley, and they were initially designed along with the winning submission by Eero Saarinen for the Gateway Arch back in 1948.

When it came time to actually build the Arch - when they had money to build the Arch - he reconfigured the landscape into the plan that you see today when you visit the Arch: the curved walkways, reflecting ponds. And one of the other big features of the landscape was allees, as we call them - long sidewalks that have trees growing on each side of them that really set them apart. And these so-called allees are pathways that lead to the Arch.

They're really obvious to anybody that comes to the Arch grounds. It's almost like big neon arrows saying, "this way to the Arch." But it's all done through the landscape.

The allee trees were primarily planted between about 1971 and 1978. So the problems include the fact that they're planted in tree pits. So there's a confined area for the root system.

The soil content here is very bad. The original content was where the old city of Saint Louis was, and so there are old bricks and foundations and all kinds of things buried underground. And the fill that was brought in was brought from an area that didn't have really very good soil either.

So all these things have contributed to trees that are somewhat stunted in their growth and have pretty much reached the end there life cycle, in terms of they're not going to grow any larger, and things are going to start to wear them down to the point where they need to be replaced.

Michelle Pearce, Gardener Supervisor, Jefferson National Expansion Memorial:

The emerald ash borer is expected to be in the Saint Louis area, if it's not already. It's already in Missouri. Once it has bored into the wood, it gives the tree maybe a year or two life expectancy. And it will start declining right away and become hazardous.

And so we began looking for an alternative tree replacement. And in the new construction, all the Ash trees will be removed and the London Plane tree will be planted in its place.

James Sottilo, CityArchRiver Design Team:

The London Plane trees are currently being held at Hoette tree farm up in New Florence, Missouri. They were shipped in this spring from Halka Farms in New Jersey, and they are held there for two years. Wherein that time, we're taking care of them.

We're actually building a whole natural nutrient cycling system within the root balls. So the plants will not require any fertilizer when installed. They'll have a whole natural nutrient cycling system.

You know the soil is the foundation for all things that are growing - that grow well. So there's going to be a whole structural soil that's designed that the trees will be planted in and has the right percentage of organic matter that the soils want. They drain really well, so there'll be no water being held within the root zone. So there won't be any anaerobic conditions.

The London Plane - the beauty of it is that it doesn't have a lot of issues related to insect or disease pressure that could be detrimental to the whole health of the planting row, since there are so many trees going in. And it's this historical processional walk so it needs to be a monoculture.

Bob Moore:

There are several places around the world where the London Plane trees already worked out well for people – as single species planting and just surviving very well. Here locally in the Saint Louis area, if people drive out to Skinker - on one side is Forest Park - on the other side you got the History Museum archives and down toward Washington University, almost all the trees along there are either Sycamore or London Plane tree, and you would get an idea from driving along there what it might look like on the Arch grounds.